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AUTHOR Johnson, Robin; McKnight, Terri; Tackett, Beverly
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ABSTRACT

This document is designed for high school teachers to use in teaching a course that introduces students to computing through hands-on experience with databases, spreadsheets, desktop publishing, and word processing. The document begins with a rationale, brief course description, list of course objectives, and list of 10 innovative teaching strategies. The remainder of the guide consists of units devoted to the following topics: word processing (improve keyboarding and language skills and use word processing software to create and format formal and simplified memorandums, reports, and business letters); desktop publishing (create documents with borders, original drawings, color; clip art, and original art; use draw and paint tools; and apply effective design principles); spreadsheets (become familiar with spreadsheet components, navigate in a spreadsheet, change cells' sizes, enter data and simple formulas, use simple formatting features, and save and print a spreadsheet); and databases (plan, create, and modify a database; enter records; format fields; show records; sort a database; execute queries to find specific information in a database; and create, format, and print database reports). The units include exercises, sample documents, and self-assessments. Contains 11 references. (MN)

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ED 412 345

INTRODUCTION TO COMPUTER APPLICATIONS

FOR DR. DONNA EVERETT

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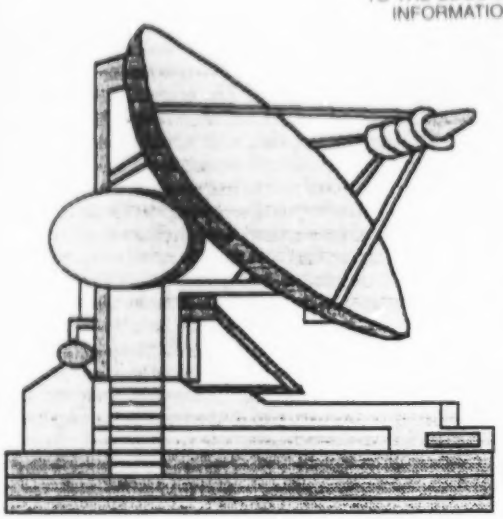

BY:
ROBIN JOHNSON
TERRI MCKNIGHT
BEVERLY TACKETT

CE 079 829

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APPLICATIONS
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INTRODUCTION TO COMPUTER APPLICATIONS

RATIONALE

We believe the best way to introduce students to computing is with an introductory course that gives them considerable "hands on" computer experience. The course will include applications, spreadsheet, database, desktop publishing and word processing that will meet the expanding growth of technology, the data explosion and the expanded use of computers in the work force. This class is an initial step in preparing students for the rapid growth of technology.

COURSE DESCRIPTION

Students will be introduced to a variety of application software to include database, spreadsheet, desktop publishing and word processing. These skills will enable students to build essential career portfolios.

COURSE OBJECTIVES

1. Basic review of Keyboarding Skills
2. Prepare Word Processing Documents to include memos, letters, reports and tables
3. Introduce entry-level spreadsheet, desktop applications in preparation of tables and flyers
4. Introduce the basics of a database

Innovative Teaching Strategies

- Summarize journal articles

- Develop step-by-step instructions for a specific computer function. Each student would be asked to write instructions for a different function. These instructions would then be given to another student to perform.

- Group instruction is often an appropriate way to review previously learned material, to introduce a new function, or to guide students through performing a function.

- Peer tutoring sessions can also be used to help students. Strengthen their verbal communication skills. Divide the class into two groups and assign each group a different computer function to learn. Students are required to learn to function individually by choosing from a variety of methods such as textbook manual or tutorial. Students are then assigned a partner from the other group and take turns explaining the newly formed function.

- Collect problem situations that first-time workers might experience. In small group discussions, encourage your student to work out potential ways to handle the problems. Example: How to handle disgruntled employees? What to do if an employee is repetitively late arriving for work? How to handle inappropriate behavior on the job?

- Ask the students to interview someone who works with current technology and bring the information back to share with the class.

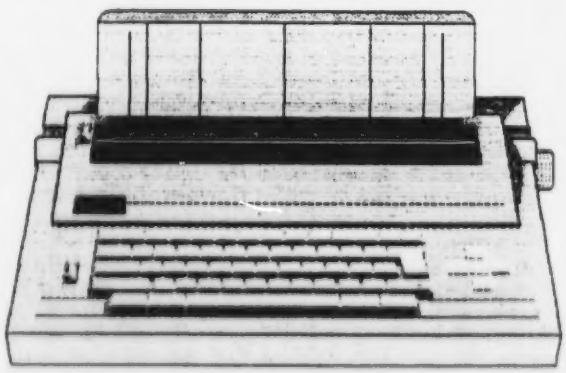
- Through example and role playing situations, show the importance of polite conversation, tact and friendly small talk.

- Ask students to research a country mentioned in the news recently. Set up the assignment as a memorandum or a report to several middle managers who are going overseas to help set up a foreign office. Suggest
- messages to help the managers prepare for their trip.

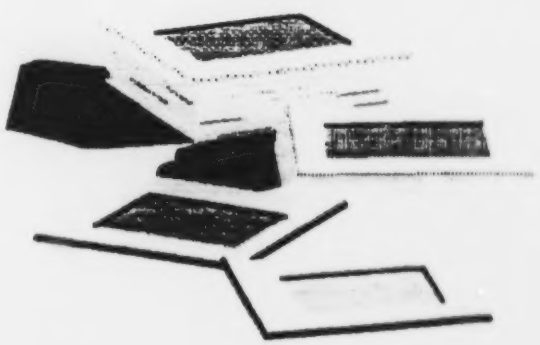
  Climate
  Transportation and geography
  Religion
  Standard of living
  Food
  Culture
  Trade

- Have the students type an autobiography entitled "I'm Unique" using Desktop Publishing software incorporating graphic design concepts into the report.

WORD PROCESSING
REVIEW



MEMORANDUMS
REPORTS
LETTERS



WORD PROCESSING REVIEW

At the completion of this unit students will be able to do the following:

1. Review the basic components of the software utilized in your particular class. Example Windows, Microsoft Works, Wordperfect, etc.

2. Cover basic review of keyboarding such as home-row keys, keypad, and function keys.

3. Cover basic review of spacing, punctuation, and proofreader marks.

4. Review setting margins, tabs, and changing fonts.

5. Review save and print functions.

APPLICATIONS

*Type a multicultural activity straight copy, block style, single spaced.

*Give file name and save document.

*Modify document to double spaced, add title (center, change font, bold type), change margins (1.5 left margin), indent paragraphs.

*Up-date, save, and print document.

*Give 2 one-minute timed writings.

*Evaluation for the multicultural activity will depend upon format, proofreading, and editing. Evaluation for the timed writings will depend upon speed and accuracy.

Imagine yourself a managerial accountant for a small manufacturing firm. Because of hard economic times, your firm is just managing to make a profit, although it is doing better than most other firms of its size because of its emphasis on safety. This adherence to safety has kept it free of workman's compensation claims and employee litigation.

Recently your firm has received notification that certain new safety procedures must be implemented throughout your branch of manufacturing. The state regulatory agency has established these procedures to combat the large number of injuries and resulting financial outlays that have been occurring. Upon closer investigation, however, you determine that the cost of implementing the new procedures would absorb any profit that your company was making and would even put it into debt.

You present the numbers to the members of your management team. The main problem seems to be the formal classes the regulatory agency demands be scheduled. Instructors would have to be paid, classrooms rented, and employees reimbursed for the time spent in class. Until now, your firm has relied on a mentor program to promote adherence to safety procedures. In this program, an experienced worker trains one less experienced, by demonstrating how to use equipment in a safe manner. Only when the new worker has shown capability with a machine is he or she allowed to operate it alone. This method has kept injuries in check and has proven to be a cost-effective training method.

A team member suggests keeping the mentor system of training and adjusting the books to make it look like the regulatory agency's system is in place. The more this idea is discussed, the more logical it seems. However, this solution presents an ethical dilemma.

One option might be to outline the mentor program to the regulatory agency, citing the low injury rate as a measure of the program's success, and then petition the agency to allow the company to continue the present program. Another option might be to research methods by which the new regulations could be implemented at a lower cost. Could an instructor be found among the employees? Could space in the plant be designated as a classroom? Might employees willingly use their lunch hours to participate in the classes? As in every situation that involves tough decisions, it is best to evaluate all options before taking action.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

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TW-6

Imagine a day in the life of a physically challenged person. You might find, for example, that in a wheelchair everything takes longer. To rise in the morning, you must use your arms to push yourself to a sitting position. Then you must use your arms to pull your torso onto the seat of the wheelchair beside your bed. Next, you must use your arms to lift your legs onto the footrest of the wheelchair. These maneuvers require abundant energy and tremendous strength in the arms.

In a kitchen, most cabinets would be too high or too low for you to reach from the wheelchair. You might, therefore, use a set of tongs to grasp the food and dishes you need. The sink is too high; so with the wheelchair beside it you must reach up and to the side to use the sink.

Doorways and bathrooms pose new challenges. Narrow doorways must be widened to allow wheelchair access. Likewise, raised thresholds must be crossed. The bathroom is often small, and doors open inward. Imagine wheeling a chair into a small bathroom and closing the door behind you.

Physically challenged persons must remodel their homes to suit their handicaps or rent housing that accommodates their handicaps. There is no control, however, over public streets and buildings, friends' homes, or the work place. A wheelchair cannot be pulled close to tables and desks; its front extends about two feet in front of the torso. Many restaurants thus cannot be used. Shifting to a chair or booth may not work well as the body must be supported, often with the hands.

In the workplace, doors can be heavy and self-closing. Fortunately, levers offer an improvement to turning a knob, pushing a heavy door open, and holding it open while wheeling through. To get to a higher floor in a building with no elevator, you might have to go to the parking garage. There you would get into the car and drive to the proper level, accessing the floor you want through the garage. Of course, all this takes time, energy, effort, and careful maneuvering.

Most physically challenged individuals want to be as independent as possible. Therefore, laws have been developed to assist the access of physically challenged persons in public buildings. Improvements include automatic doors; ramps; wide hallways, doorways, and aisles; accessible restrooms and handrails; and handicapped parking spaces. More devices are being created for activation by voice, breath, and head movements.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

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UNIT OBJECTIVES:

After completing this unit, students will be able to:

- **create formal and simplified memorandums.**
- **improve language skills.**
- **utilize proper formatting procedures for preparing memorandums.**
- **explain the use of memorandums in today's office.**
- **identify the components of a memorandum.**

APPLICATIONS:

Students will:

* Discuss the purpose of a memorandum and the difference between a formal and simplified memorandum.

* Demonstrate various types of memorandums on transparency.

* Discuss the proper formatting for memorandums:

  Block style
  1" side margins
  Single space body
  Double space between paragraphs

* Discuss components of a memorandum:

  Date
  Addressee's name
  Subject

Body
Writer's name
Operator's initials

* Students should complete assignments for simplified and formal memorandums.

* Students should prepare a memo (using the style of their choice) to their principal discussing some of the new technology that they have learned about in this class. This assignment will be evaluated on the basis of content, format, and accuracy with each weighing 25%.

SIMPLIFIED MEMORANDUM

April 25, 19--

(qs)

Tony Mendez, Marketing Manager
(ds)
CONDUCTING POSITIVE PERFORMANCE APPRAISALS
(ds)
It is almost time again for annual performance reviews, a process that you like many of our other managers, may not anticipate eagerly. So often employees and managers look upon these conferences as a time to discuss all the things employees have done wrong during the past year. With this approach to performance reviews tension is high; and neither the managers nor the employees feel good at the completion of the reviews. Further, the overall productivity of the company seems to suffer, at least for a few weeks.
(ds)
Our Executive Board recognizes that improvements need to be made in our performance appraisal procedures, and they have asked me to arrange for two half-day programs on this topic. If you would like to participate in this program, please send me a list of half days when you can attend during the month of May. I have enclosed a form that you may use to indicate if you are interested in the program and, if so, to mark the times and dates you can attend.
(ds)
Terry Austin, Director of Human Resources
(ds)
il
(ds)
Enclosure

FORMAL MEMORANDUM

TO: Isabel Garcia
(ds)
FROM: Sidney Cross, Assistant to Personnel Director
(ds)
DATE: November 3, 19--
(ds)
SUBJECT: Insurance Benefit Package
(ds)

As we discussed in your orientation session yesterday, Maxwell Nash Corporation does provide insurance benefits for its full-time employees. The insurance plans for which are eligible are:

(ds)

1. Medical, hospital, and major medical insurance covering the prevailing fees charged by participating physicians, hospitals, and other health agencies. Employees may elect to participate in this insurance plan.

(ds)

2. Life insurance including basic life, accidental death, and dismemberment coverage at a rate of two times the employee's regular annual salary. Employees may elect to participate in this insurance plan.

(ds)

Maxwell Nash will pay 90 percent of the cost of the premium for each of these plans. Employees pay the remaining 10 percent through payroll deduction.

(ds)

Please decide within the next 15 days which of the three voluntary plans in which you will participate. If you need additional information, contact Mark Harmon in the personnel department.

(ds)

sjc

SIMPLIFIED/STANDARD MEMO RUBRIC

COMPONENT	OUTSTANDING (22-25)	COMMENDABLE (18-21)	ADEQUATE (14-17)	UNACCEPTABLE (13-0)
ORGANIZATION	Paragraphs are logical, coherent and easy to follow.	Paragraphs are somewhat logical and coherent.	Paragraphs are in vague order, no evidence of logic or coherence.	Paragraphs are in no order, major revisions needed.
FORMAT	Placement of all parts of memo are arranged correctly.	Placement of one memo part is inaccurate.	Placement of one memo part and spacing are inaccurate.	Placement of two or memo parts plus spacing are inaccurate.
ACCURACY	Students have successfully proofread and spell checked their document with zero errors.	Students may not have detected an error that is spelled correctly, but is misused in a sentence.	Students may not have detected two spelling errors.	Several errors in spelling, grammar usage, and punctuation.
APPLICABLE	This activity is applicable to any situation to where a student would need to write a memo.	In writing the memo students addressed information that was not necessary.	Memo was vague, no evidence of logic or coherence.	The memo lacked organization, format, and accuracy.

REPORTS--ACADEMIC AND UNBOUND

Upon completion of this unit students will be able to:

1. Format one-page academic reports and multi-page academic reports
2. Format a multi-page unbound report with works cited and a title page
3. Use headers to place page numbers on their reports
4. Determine when page breaks should be inserted
5. Use View Document--to ensure proper placement
6. Spell-Check and proofread their document
7. Print Reports

OBJECTIVE 1

Students will be able to format a one-page academic report with 100% correct format and accuracy.

Applications:

1. As the teacher explains the format, students will view an example of one-page academic report.

2. Teacher will observe and assist students as they format one-page academic report. Save.

3. Students will key an additional report independently. Save.

4. Teacher and students will review the proper format of one-page academic reports.

5. Retrieve the two academic reports students have keyed--spell-check and proofread documents. Up date and save.

6. Print the two documents for a grade.

7. Students will review their graded work and make corrections.

8. Review format with students and test them on a report. (format and accuracy).

9. a. Remediation--for students that do not know the format and failed to correct all errors.

9. b. Supplemental Activity--for students who scored 100% on format and accuracy.

10. Group students according to the size of your class. Students will do research on the internet on a career that they are interested in. They will prepare an academic report.

OBJECTIVE 2

Students will be able to format multi-page academic reports with 100% accuracy for format and 90% accuracy for finding and correcting all errors.

Applications:

1. The teacher will explain that the multi-page academic report is formatted in much the same way as the one-page report. The two differences are numbering pages and determining page breaks.

SAMPLE--ONE-PAGE ACADEMIC REPORT

Chris Roberts

Mrs. Rosa Pirkey

English III

15 April 1997

Human Relations in the Business World

Being able to work well with other people is one of the most important attributes a person with a business career can have. Office workers should consider themselves to be team members with a single goal of working together for the good of the company.

Knowing oneself helps in understanding others. Most people have many needs in common. They want their basic physical and emotional needs met; they want to be safe and comfortable, and they want to be liked and accepted. These needs can provide a foundation for getting to know, accept, and like others.

Courtesy is an important key to getting along with others. Learning and using co-workers' names is imperative, as well as giving sincere compliments and offering to help out when critical deadlines must be met.

If all employees believe that they are working toward one common goal of success for their business, they will begin to ace and respond as team members. This will, in turn, lead to good human relations and higher productivity.

with a bright, positive outlook is uplifting to others and tends to form long-lasting and meaningful relationships....

SAMPLE OF SECOND PAGE OF AN ACADEMIC REPORT

1. **Place the writer's last name on line 4 followed by the page number on all pages of the report. This "header" information should end at the right margin.**

2. **Leave at least two lines of a paragraph at the bottom of a page, and carry at least two lines to the top of a new page. (a three-line paragraph wold have to be keyed all on one page.)**

SELF-ASSESSMENT FOR AN ACADEMIC REPORT

CHECK TO SEE THAT YOU DID THE FOLLOWING BEFORE YOU TURN IN YOUR WORK FOR ASSESSMENT

1. Are all of your margins set on 1 inch. (top, bottom, and side)?
2. Did you double space the entire report?
3. Did you key your name at the left margin, followed by your teacher's name, the class name, and the date in military style?
4. Did you center the title, and use initial caps, which means to capitalize the first letter of each important word?
5. Did you indent your paragraphs 5 spaces?
6. Did you proofread your document?
7. Did you use spellcheck on your document?
8. Did you look at your example document to make sure your report was similar?

If you have completed all of these steps, your paper should be ready to turn in for assessment.

2. a. The teacher will introduce the following features that your word processor provides: headers, automatic page breaks, soft and hard page breaks, widow and orphan protection, and view document.

2. b. Students will be provided with a step-by-step instruction sheet for using the new word processing features introduced. Allow them ample time to reinforce their understanding of the new features.

3. Students will be provided a handout of what the report looks like on the second page and remaining pages.

4. With the teachers' assistance, students will key a two-page academic report with page numbers and properly using page breaks.

5. Students will use spell-check and proofread their document. Save document and print out for evaluation.

6. Students will review their evaluation, ask questions and correct any mistakes.

7. Students will key a multi-page report without the teachers assistance. They will format, proofread, spell-check, save and print document. Turn in report for evaluation.

8. Students will review evaluation. At this time reinforce new features that may be causing problems.

9. Independently--students are to complete three reports. 1-one-page academic report and 2-multi-page academic reports. They are to use correct format, spell-check, proofread, view document, save and print document. Turn in for evaluation. 100% accuracy for format and 90% accuracy for proofreading and spell-checking.

10. Students that do not meet requirements will go through remediation. Those that do may do supplemental activities.

OBJECTIVE 3

Students will be able to format an unbound report with works cited list and a title page with 100% format accuracy and 90% proofreading and spell-checking accuracy.

Applications:

1. Discuss with students the many types of reports that exist. Students will need to adapt their format according to what they are being asked to do.

SAMPLE TITLE PAGE FOR UNBOUND REPORT

ELECTRONIC KEYBOARDING APPLICATIONS

(Name of student typing report)

Boyd County High School

Current Date

Report 19

SAMPLE OF UNBOUND REPORT WITH WORKS CITED PAGE

ELECTRONIC KEYBOARDING APPLICATIONS

Learning to key is of little value unless one applies it in preparing a useful document--a letter, a report, and so on. Three basic kinds of software are available to assist those with keying skill in applying that skill electronically.

Word Processing Software

Word processing software is specifically designed to assist in the document preparation needs of individuals or businesses. Word processing software permits the user to "create, edit, format, store, and print documents." (Fulton and Hanks, 1996, 152) The software can be used to process a wide variety of documents such as memos, letters, reports, and tables.

This software has special features such as automatic centering and wordwrap that reduce time and effort. It also permits easy error correction, format and sequence changes, and insertion of variables "on screen" before a copy is printed. These features increase efficiency by eliminating document rekeying.

Database Software

A database is any collection of related items stored in computer memory. The data in a database may be about club members, employee payroll, company sales, and so on. Database software allows the user to enter data, arrange it, retrieve and change it, or select certain data (such as an address) for use in documents. (Tilton, et al, 1996, 112-113)

Spreadsheet Software

A spreadsheet is an electronic worksheet made up of columns and rows of data. Spreadsheet software allows the user to "create", calculate, edit, retrieve, modify, and print graphs, charts, reports, and spreadsheets" necessary for current business operations and in planning for the future. (Fulton and Hanks, 1996, 156)

Employment personnel look favorably upon job applicants who are familiar with these kinds of software and how they are used.

Works Cited

Fulton, Patsy, J., and Joanna D. Hanks. Procedures for the Office Professional. 3d ed. Cincinnati: South-Western Publishing Co., 1996.

Tilton, Rita S., et al. The Electronic Office: Procedures & Administration. Cincinnati: South-Western Publishing Co., 1996.

ACTIVITY R-6

Business Report: unbound format, multipage

Format the title correctly.

Organ Transplants--Who Decides?
By Sophie Dressler

For many years, only organs from an identical twin or close relative could be used for transplant. But new antirejection drugs that either fool the immune system or block its action have been developed. Further development of these drugs may lead to the day when transplanted organs are not rejected, even if the donor is not a close relative. However, there are more people needing transplants than there are organ donors.

Sources of Organs

Most organs used for transplantation today are from accident victims. These organs come from individuals who are brain dead, but whose organs continue to function. Some potential donors have been kept "alive" by machines. When their families have agreed to donate their organs for transplantation, the machines are turned off, and their organs are saved and implanted in recipients who need them. In order to make this process as efficient and fair as possible, a computerized network called the United Network for Organ Sharing (UNOS) has been set up by the more than 140 organ transplant centers in the United States. Each network member maintains information on patients who need organs and where they are located. The transplant centers also maintain records of the donor's major histocompatibility complex (MHC), blood type, and other data. MHC is a measurement of the kinds of antigens produced by the organ and includes four important antigens. For a transplant to occur, there has to be at least one matching antigen between donor and recipient. A perfect match of four antigens would reduce the chances of rejection to a minimum.

Choosing a Recipient

Because there are so many more potential recipients than donors, transplant centers maintain waiting lists. When an organ becomes available, the recipient with the best match of antigens usually gets it. Sometimes, however, the organ will go to a recipient who is not as close a match, but desperately ill, especially if the best match has a good chance of surviving the wait for another organ. Other factors also influence the choice of recipient. Doctors often try to match the weight of donor to recipient, for example.

Who Makes the Decision?

Today, the decision as to who receives particular donated organs is made by doctors, usually part of a committee at a hospital that does transplants. But some people feel that this should not be just a medical decision. What happens when one organ is available that matches two needy patients? How do doctors choose between two heart patients--say a young boy and a young woman who has just

(continued)

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BUSINESS LETTERS
OBJECTIVE ONE

Students will create block and modified block style letters using correct spacing, margins, and grammar rules.

1. Explain the different features and show examples of block and modified block style letters.
2. Explain the difference between a personal business letter and a business letter.
3. Discuss margin settings.
4. Discuss spacing (EX. 2 spaces between the 2 letter state abbreviation and the zip code).
5. Discuss open and mixed punctuation.
6. Discuss the importance of proofreading and editing errors.
7. Key business letters using the two format styles.
8. Save and print documents.
9. Evaluation.

OBJECTIVE TWO

Students will create block style business letters using special letter parts such as an attention line, subject line, and enclosure notation. They will continue to use correct spacing, margins, and grammar rules.

1. Review format for block style business letters.

GUIDELINES TO FOLLOW FOR BUSINESS LETTERS
BLOCK FORMAT

1. Key all lines at the left margin.

2. Key the date on line 15 (Spell out the month).

3. Key the inside address a QS below the date.

4. Key the salutation a DS below the inside address. For open punctuation, do not key a colon after the salutation.

5. SS the body of the letter and do not indent paragraphs (DS between paragraphs).

6. Key the complimentary close a DS below the body. For open punctuation, do not key a comma after the closing.

7. Key the originator's name (the person who wrote the letter) a QS below the closing in order to leave space for the person's handwritten signature.

8. Leave 2 spaces between the two-letter state abbreviation and the zip code.

MODIFIED BLOCK

Use the block format instructions except for the following:

1. The date and the closing lines (complimentary close, writer's name, and writer's job title or department) start at horizontal center.

2. Paragraphs may be indented or they may be blocked at the left margin.

2. Review spacing and margin rules.

3. Discuss special letter parts (attention line, subject line, enclosure notations).

4. Key a block style business letter using special letter parts.

5. Proofread and edit errors.

6. Save and print document.

7. Evaluation.

EXAMPLE BLOCK STYLE LETTER

July 20, 1997

(QS)

Sarah Walters
Ashland Oil Foundation
P. O. Box 501
Ashland, KY 41102

(DS)

Dear Ms. Walters:

(DS)

I am a teacher at the Ashland Day Treatment Center who recently spoke to Harold Johnson about acquiring computers for our school. I would like to request 15 computers and 5 printers if you have them to spare.

(DS)

The use of these computers will greatly benefit both our students and our classroom instruction. As a treatment center, our students are comprised mainly of disadvantaged high school students who are in the state's custody and have been through the court system. Due to the problems that these students have had, their educational needs have been pushed aside causing them to fall behind in all subject areas.

(DS)

By using these computers, the teachers at this school hope to provide a fun educational tool that will evoke renewed interest from our students. Because most of these students will not be attending college, the main goals that we would like them to work on are communication skills and computer skills which will help them to acquire jobs in the future.

(DS)

I hope that you will be able to help us to meet these goals. Thank you for your time and consideration.

(DS)

Sincerely,

(QS)

Karen Smith
Business Teacher

EXAMPLE MODIFIED BLOCK STYLE LETTER

July 20, 1997

(QS)

Nancy P. Phelps
Human Resource Director
1501 Lexington Avenue
Ashland, KY 41101

(DS)

Dear Ms. Phelps:

(DS)

Susan Thomas has been a student of mine for the past year, and has been a pleasure to have in class. She is an active participant in all classroom activities, and shows remarkable analytical abilities. She also works to achieve the highest level of excellence, and she works diligently to motivate her peers to do the same.

(DS)

Susan is a very friendly and outgoing young lady, who strives to make our school the very best through her leadership and communication abilities. With her effervescent personality, she easily works with both faculty and staff.

(DS)

Susan is one of those remarkable students who I come into contact with only every once in a while. I highly recommend her to your program, knowing she will serve as an asset.

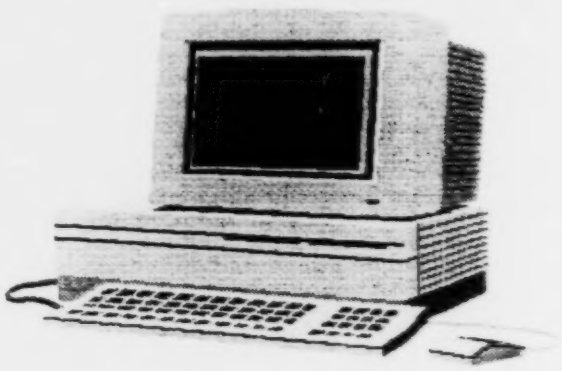
(DS)

Sincerely,

(QS)

Beth Jones
Business Teacher

DESKTOP PUBLISHING



UNIT OBJECTIVES:

After completing this unit, students will be able to:

- **create documents with borders, original drawings, and color.**
- **utilize clip art as well as original paintings using paintbrush.**
- **manipulate fills and patterns to create designs.**
- **use draw and paint tools.**
- **apply effective design principles.**
- **use software stationery and templates.**
- **choose and arrange clip art pictures to enhance documents.**

APPLICATIONS:

Students will:

1. Create a title page with a border.

* Examples of various title pages are demonstrated using transparencies.

* Instructions will be given to students on how to access applicable software.

* Students are instructed on proper layout of a border as well as how to select, resize, and move objects inside the border.

* A practice exercise is given as a class project.

* The students are to write a brief article about one area of computer technology that they have experienced or learned something about.

The students are then asked to prepare a title page with a border for this article. The title page should be full page.

* Evaluation will be based on creativity of design, overall look, and correct spelling and punctuation with each weighing 25% of the overall grade.

2. Designing a cover page.

* A demonstration of several different styles of cover pages will be shown to the class using power point or overhead transparencies.

* Instruction is given on how to use draw tools, add fills, and borders.

* Students should create text objects and stack objects on their cover pages.

* A practice exercise is given as a class project.

* Bring in recent news articles from the internet, technology publications or newspapers that are relative to recent trends in technology. Have the students read an article and write a brief summary of what they read. Ask the students to then prepare a title page for their summary.

* Evaluation will be based on creativity of design, overall look, and correct spelling and punctuation.

3. Designing a flyer.

* Instruction will be given as to proper layout and design of a flyer.

* Examples are demonstrated using transparencies. Different types of flyers including portrait and landscape as well as bifold and trifold styles should be discussed.

* A demonstration of clip art software and application is given.

* Students will be asked to work in groups of four to design a flyer for use in their local community to highlight points of interest, entertainment, food, lodging and additional tourist information. This flyer should contain graphics and be visually appealing to its viewers.

* Evaluation is based on the following criteria:

Content of flyer	20%
Neatness	10%
Creativity	10%
Use of clip art and or graphics	20%
Correct spelling and punctuation	20%
Ready for print	20%

THE ART
OF CREATIVE
DESKTOP
PUBLISHING
MADE SIMPLE

BY: R. JOHNSON

THE ART OF CREATIVE DESKTOP PUBLISHING MADE SIMPLE

by: R. Johnson

SALES MADE SIMPLE!
A QUICK APPROACH TO ADVERTISING!

YOU CAN CREATE YOUR OWN ADVERTISING

WITH AS SIMPLY AS THIS.

IT ONLY TAKES YOUR OWN CREATIVITY AND

SOME BASIC SKILLS AT OPERATING A COMPUTER.

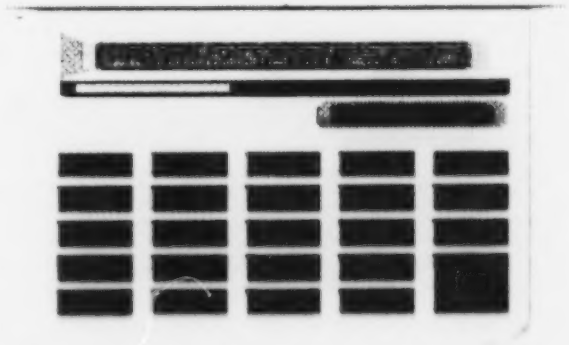
WITH PROGRAMS SUCH AS FIRST PUBLISHER, YOU TOO CAN

CREATE FINISHED PRODUCTS FOR USE IN BUSINESS.

FOR ADDITIONAL INFORMATION REGARDING "CREATE YOUR OWN FLYER" SEE YOUR INSTRUCTOR.

BEST COPY AVAILABLE

SPREADSHEETS



SPREADSHEET

Upon completion of this unit students will be able to:

1. Define and understand the term spreadsheet
2. Be familiar and understand the different parts of a spreadsheet
3. Move around in the spreadsheet
4. Enter data in a spreadsheet
5. Change the size of a cell
6. Enter data, and enter simple formulas using addition subtraction, multiplication and division
7. Use simple formatting features
8. Save and Print a Spreadsheet

OBJECTIVE 1

Students will be able to enter data into a spreadsheet. Insert the proper formula and manipulate data in a simple spreadsheet with 100% accuracy.

Applications

1. Teacher will initiate a discussion on the definition of a spreadsheet and what its purpose is. Discuss with students the many ways in which a spreadsheet may be used.

2. You may use a spreadsheet grid to introduce to students what a spreadsheet may look like.

3. Students will open their spreadsheet so that it appears on the screen. They will see the various parts of the spreadsheet. Students will be provided a thorough explanation of each part of the spreadsheet as it appears on their screen.

4. Students will learn to move the highlight by pressing the direction keys. Find out where your go to command key is located.

5. Retrieve a sample spreadsheet that your teacher will provide for you. Notice how the numbers are right aligned and the text is left aligned.

6. Students should be informed of the width of the cell. The default is usually 10 spaces but it may vary depending on what program that you use.

7. Change the width of a column using format. Show students how to select a block of text.

8. Play around with the spreadsheet that students have opened on their screen. Change numbers, make columns bigger or smaller.

9. Teacher will introduce how to enter a formula. (This will vary depending on what program you are using). Make sure students understand everything has to be done by cell address.

10. Clear screen to enter data for a new spreadsheet.

11. With assistance from teacher, students will enter data in a spreadsheet.

12. After the data is entered, the class will do their formulas together, make sure all students understand where all of the information is coming from before you proceed.

13. Students need to make adjustment to column widths as they are needed.

14. Students--as a group will format the columns that are money. Save spreadsheet and print--then turn in for evaluation.

15. Students will receive 1st spreadsheet back to review.

16. Assign a similar spreadsheet for students to work on their own. Enter formulas, format accordingly--save and print. Turn in for evaluation.

17. Return spreadsheet to students to review.

18. Assign 3 spreadsheets that will include +, -, *, and / in the formulas to use and format properly. Save, print and turn in for evaluation.

19. If students meet all requirements, assign them a critical thinking problem as a group. If they need additional work on the basic spreadsheet, assign more spreadsheets that are appropriate.

20. Additional Activity--computer teachers and math teachers may work together to explain spreadsheets to their students. (Cooperative Learning)

Exercise 5: Entering Labels and Values; Simple Editing; Saving; Printing; Clearing the Screen

To determine their profit for the first quarter, the Bit-Byte Computer Company has asked you to prepare a spreadsheet file for an income statement. (An income statement shows the total income, expenses and profits of a business for a specified period of time.)

Directions:

1. Create the spreadsheet below.
2. Enter the labels and values in the exact cell locations shown in the illustration.
3. Use the backspace, strikeover or cell erase methods to correct any errors.
4. Save the file; name it **INCOME**.
5. Print one copy.
6. Clear your screen.

Vocabulary:

income statement	profit
fixed expense	variable expense
gross profit	net income
merchandise	

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    |   A    ||    B    ||    C    |
1   BIT-BYTE COMPUTER COMPANY
2   INCOME STATEMENT FOR 1989
3
4   INCOME FROM SALES          8000
5   COST OF MDSE SOLD          2000
6   GROSS PROFIT
7
8   EXPENSES:
9     Fixed                    1500
10    Variable                 4000
11    Total Expenses
12  NET INCOME
```

LESSON 2: Exercises 9-14

ENTERING FORMULAS for :
Addition • Subtraction • Multiplication • Division

Exercise 9: Entering Formulas for Multiplication and Addition

Directions:

1. Recall **INVOICE.**
2. Enter the label TOTAL where indicated.
3. To find AMOUNT for each item:
   • Enter a formula to multiply QUANT by UNIT PRICE.
4. To find TOTAL:
   • Enter a formula to add the AMOUNT column.
5. Re-store the file.
6. Print one copy.

	A	B	C	D	E	F	G
1				INVOICE			
2							
3	ITEM					UNIT	
4	NO	QUANT		UNIT	DESCR	PRICE	AMOUNT
5							
6	16-3344		10	EACH	CHIPS	55.7!	
7	16-4401		3	DOZ	RIBBONS	63.8!	
8	15-3342		20	EACH	DISKS	.7!	
9	15-1401		3	EACH	CABLES	14.9!	
10							
11	[redacted]						

Exercise 10: Entering Formulas for Subtraction and Addition

Directions:

1. Recall **SALES.**
2. Enter the label TOTAL where indicated.
3. To find NET CHANGE for each item:
   - Enter a formula to subtract YEAR 1 from YEAR 2.
4. To find TOTAL:
   - Enter a formula to add the YEAR 1 column.
   - Enter a formula to add the YEAR 2 column.
5. Re-store the file.
6. Print one copy.

	A	B	C	D	E
1		BIT-BYTE COMPUTER COMPANY			
2		SALES INCOME - 2 YEARS			
3					
4	ITEM				NET
5	NO	ITEM	YEAR 1	YEAR 2	CHANGE
6					
7	18-4008	COMPUTERS	73246.98	88004.56	
8	18-1008	MONITORS	20567.4	18755.31	
9	18-3008	PRINTERS	52349.76	55058.56	
10	18-0008	SCANNERS	35126.66	65845.9	
11	18-2008	MODEMS	7089.54	4800	
12	18-8008	DRIVES	35876.07	54987.37	
13	18-9008	KEYBOARDS	35156.3	38779.29	
14					
15					

Exercise 12: Entering Formulas for Multiplication, Subtraction, Addition and Division

Directions:

1. Recall **PAYROLL**.
2. Enter the labels TOTALS, AVG HRLY RATE, and AVG HRS WORKED where indicated.
3. To find GROSS PAY for each employee:
   - Enter a formula to multiply HOURLY RATE times HOURS WORKED.
4. To find NET PAY for each employee:
   - Enter a formula to subtract TAXES WITHHELD from GROSS PAY.
5. To find TOTALS:
   - Enter a formula to add the GROSS PAY column.
   - Enter a formula to add the TAXES WITHHELD column.
   - Enter a formula to add the NET PAY column.
6. To find AVG HRLY RATE:
   - Enter a formula to average* the HOURLY RATE column.
7. To find AVG HRS WORKED:
   - Enter a formula to average the HOURS WORKED column.
8. Re-store the file.
9. Print one copy.

Vocabulary: average*

*NOTE: The conventional method of averaging should be used for this exercise. A shorter method will be covered in a later lesson.

	A	B	C	D	E	F	G
1				PAYROLL			
2							
3	EMPL	EMPLOYEE	HOURLY	HOURS	GROSS	TAXES	NET
4	NO	NAME	RATE	WORKED	PAY	WITHHELD	PAY
5							
6	2376	FORD	7.89	35	[redacted]	98.03	[redacted]
7	0971	BELL	8	30	[redacted]	85.2	[redacted]
8	1549	CARTER	6.5	25	[redacted]	57.69	[redacted]
9	1025	AARON	9	40	[redacted]	127.8	[redacted]
10	1001	EDWARDS	5.57	36.5	[redacted]	72.17	[redacted]
11	0940	DAVIS	6.3	39	[redacted]	87.22	[redacted]
12							
13	[redacted]				[redacted]	[redacted]	[redacted]
14							
15	[redacted]		[redacted]				
16	[redacted]			[redacted]			

Exercise 20: CRITICAL THINKING PROBLEM
Review of Lesson 3

ACE MANUFACTURING COMPANY has asked you to prepare a spreadsheet file for their payroll. While it will be similiar to the one you prepared for the Bit-Byte Computer Company, it will not be exactly the same.

Directions:

1. Plan your spreadsheet on the grid provided by your teacher.
2. Create a spreadsheet file on the computer from the data below. Use appropriate labels. Include a title.

Name	Exemptions	Hours	Pay Rate
Harris	1	38	$5.70
Gomez	3	40	6.69
Woo	2	37.5	5.43
Kiley	1	35.5	7.00
Ahmed	2	36	6.38

3. Find:
   - FEDERAL WITHHOLDING TAX (compute FWT for each employee at the rate of 28%).
   - FICA TAX (compute FICA for each employee at the rate of 7.51%).
   - MEDICAL PREMIUMS (compute medical premiums at the rate of $5 for each exemption.)
   - NET PAY.
4. Include a TOTAL line for all money columns.
5. Use the formatting features you have learned in this lesson to make your spreadsheet attractive.
6. Save the file; name it **PAYCHECK.**
7. Print one copy.

Exercise 21: CRITICAL THINKING PROBLEM
Review of Lesson 3

The Bit-Byte Computer Company has decided to give their salespeople a 5% commission on sales. You have been asked to prepare a weekly commission report. The NAMES of the salespeople, their WEEKLY SALARY, and their SALES for the week of June 2 are as follows:

	WEEKLY SALARY	SALES
ROBERTS	$430.00	$2,000
ALTMAN	500.00	1,540
DIAZ	385.00	1,854
OLSON	465.00	3,222
PIERCE	385.00	2,876
MCBRIDE	465.00	928

Directions:

1. Plan your spreadsheet on the grid provided by your teacher.
2. Create a spreadsheet file on the computer from the data above. Use appropriate labels. Include a title.
3. Find:
   - COMMISSION EARNED for each salesperson.
   - TOTAL EARNINGS for each salesperson.

   TOTALS for:
   - Sales
   - Commission Earned
   - Total Earnings
   - AVERAGE COMMISSION EARNED
4. Use the formatting features you have learned in this lesson to make your spreadsheet attractive.
5. Save the file; name it **EARN**.
6. Print one copy.

Spreadsheet Grid

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										

DATABASE

DATABASE OBJECTIVES

After completing this unit students will be able to do the following:

1. Describe a database.
2. Explain advantages of using a database.
3. Plan, create, and modify a database.
4. Enter records.
5. Save and print a database.
6. Format fields.
7. Use form view or list view to show records in a database.
8. Sort the database.
9. Execute queries to find specific information in a database.
10. Create, format, and print database reports.

Applications

*Introduce new terminology of a database such as computerized databases, records, fields, labels, and entries.

*Plan and design a form for a database using appropriate field names.

*Create a database form, modify a form by changing box widths and moving fields, and changing field names and labels.

*Enter data in a database, record by record. Save and print a database form.

*Format fields by selecting the appropriate format from the dialog box depending upon their text containing letters, numbers, or symbols. Enter new text. Use form view or list view to see their current record list.

*Use ranges or comparisons and complex queries using conjunctions to search for specific information within a database. Save and print each query.

*Sort records by fields in ascending or descending order. Sort records by using a 2nd or 3rd field option. Save and print each sort.

*Plan, create, and rename reports using titles, headings, records, and summaries. Save and print each report.

*Use sort and queries learned previously to gather relevant information for each report. Save and print reports.

*Plan, create, enter, and modify records in a database. Using sort and queries to prepare reports. Save and print final evaluation.

EXAMPLE ASSIGNMENT
CREATING A DATABASE

An adventure comic book company has hired you as a database consultant. They would like a database created that contains a list of their characters' names, any special advantages or powers they have, their partner if any, and the role of characters (ex. crime fighter, villain, assistant, etc.).

A) On a piece of paper create a list of data categories for the comic database from the specifications given above. Be sure to include both their superhero name and "real-life" name (ex. Clark Kent is Superman).

B) Most comic book characters have promotional items available for sale such as T-shirts, action figures, and other toys. The company would like to add a category that contains the best-selling promotional item for each character. Add this category to the list you created in part (a).

C) Using your list of categories, create a list of field names and types for each field.

D) Create two different sketches of the form experimenting with order, groupings, and spacing.

E) Pick the best form from part (d). Using Works, create the form in a new database.

F) Enter information for four different comic book characters.

G) Save the database and print a copy.

EXAMPLE ASSIGNMENT
SORTING A DATABASE

The store bookstore wants to use a computerized database to keep track of the textbooks in its inventory. The database should store the title of each book, the first and last name of the author, and the number of copies in stock.

A) Determine appropriate field names for the data and then create a new inventory database. Include the *Bookstore Inventory* at the top of the form.

B) Enter the following textbook data into four records of the database:
Window Design with Scraps by Kurt Tin, 1500 copies in stock
Beginning Welding by Jung Kyarrd, 1000 copies in stock
The Chemistry of Plants by Fern Tilizer, 2250 copies in stock
Geography of Michigan by Sandy Knowle, 600 copies in stock

C) Format the field sorting the number of copies in stock for commas and 0 decimal places.

D) Resize fields in Form view so that all data is visible.

E) Save the database. Print a copy of record 1 only.

F) Display the database in List view and resize fields to display all data.

G) Sort the database in descending order by the number of copies in stock.

H) Save the modified database. Print a copy of the database in List view with record and field labels.

EXAMPLE DATABASE
TEST EVALUATION

Many people use a computerized database in place of an address book.

A) On a piece of paper create a list of data categories for your address book. Be sure to include the full name, complete mailing address, and phone number for each individual.

B) Add a birthday category to your database.

C) Using your categories, create a list of field names and types for each field.

D) Create a database form.

E) Enter information for three of your friends.

G) Save the database using the name ADDRESS.

H) Reopen the database ADDRESS. Then enter seven more of your friends.

I) Apply a query to display only the people born during the year you were born. Who are they?

J) You have made a new friend, Amy Montgomery. Add her information to the database:

Amy Montgomery
713 Hilton Avenue, Richmond, KY 40475
(606) 555-2442
Born 7/5/80

K) You have decided that the first person in the database is no longer your friend. Delete that record from the database.

L) Sort the database alphabetically by last name and then print only record 4.

M) Save the database ADDRESS.

N) Reopen the database ADDRESS.

O) Create a report named *BIRTHDAYS* that includes only the Name, Birthday, and City fields.

P) Apply a query to the database to create a report that lists only those friends who live in your town.

Q) Sort the report alphabetically by last name and then print the report.

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